Office of Oversight Review of the Sandia National Laboratories Benefits and Health Services Center Program



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ACRONYMS

AAAHC Accreditation Association for Ambulatory Health Care

AL Albuquerque Operations Office
CPR Corporate Policy Requirement
CQI Closing the Quality of Improvement

DOE Department of Energy

ES&H Environment, Safety, and Health ISM Integrated Safety Management

KAO Kirtland Area Office
PHS Primary Hazard Screen
QI Quality Improvement

SNL Sandia National Laboratories

OFFICE OF OVERSIGHT REVIEW OF THE SANDIA NATIONAL LABORATORIES BENEFITS AND HEALTH SERVICES CENTER PROGRAM

1. INTRODUCTION

This report documents the results of the Sandia National Laboratories (SNL) Benefits and Health Services Center Program review conducted by the Department of Energy (DOE) Office of Oversight December 6-8, 1999. The purpose of this review was to assess the quality of the occupational medicine program by identifying positive attributes, issues, and opportunities for improvement. SNL is one of several DOE contractor facilities scheduled for a program review this year. The review focused on the weaknesses identified in past Oversight reviews and the efficacy of the site occupational medicine program.

To conduct this review, Oversight teamed with the Accreditation Association for Ambulatory Health Care (AAAHC), a non-profit accreditation organization for health-care facilities. The organization is committed to improving the delivery of health care by performing peer-based reviews of medical facilities and the services they provide. AAAHC used nationally recognized standards for occupational medicine as a template to evaluate program performance and a licensed occupational medicine physician to conduct the review. Oversight analyzed and incorporated the AAAHC evaluation results with its own review findings to determine the overall effectiveness of the SNL Benefits and Health Services Center Program.

Background

The mission of Oversight includes elements for the evaluation and analysis of DOE policies and programs in the areas of worker protection. As an important element of the DOE worker protection program, occupational medicine programs are included within the scope of selected Oversight assessment activities. Recent reviews indicate that DOE contractor occupational medicine programs are not accomplishing all of their expected objectives. At present, the processes for collecting and communicating worker exposure information and the implementation of quality management, performance evaluation, and continuous improvement are the most commonly identified weaknesses in contractor occupational medicine programs.

Report Organization

Section 2 of this report presents the results of the Oversight review of the SNL Benefits and Health Services Center Program, including positive attributes and opportunities for improvement. The report includes two appendices. Appendix A provides additional information about the conduct of the review, team composition, and the role of the AAAHC in evaluating program performance. Appendix B provides a summary of the results of the AAAHC survey of the SNL medical program.

OVERVIEW OF THE SNL BENEFITS AND HEALTH SERVICES CENTER PROGRAM

History: SNL began in 1945 on Sandia Base (now Kirtland Air Force Base) in Albuquerque, New Mexico, as part of what is now Los Alamos National Laboratory "Z" division. The American Telephone and Telegraph Company (AT&T) began managing SNL in 1949 at the request of President Harry Truman, who offered the company "an opportunity to render an exceptional service in the national interest." Providing engineering design for all non-nuclear parts of the USA's nuclear weapons was the original mission of SNL, but now a variety of national security research activities and development work are performed. AT&T continued to manage SNL through 1992 when it decided not to renew its contract with DOE. In 1993, DOE awarded the management contract to Martin Marietta (now Lockheed Martin) who continues to manage SNL today.

Mission and Activities: The primary mission of SNL is to design, develop, engineer, produce, test, and certify the non-nuclear components and subsystems of nuclear weapons. SNL also conducts broad-based research and development in environmental technologies, information systems, microelectronics, energy supplies, and advanced military, non-proliferation, and treaty verification technologies. Sandia is also collaborating with universities and medical schools in several areas of biomedical engineering for solutions to cost-effective health care. Sandia currently employees 7,500 people in its major offices and laboratories in Albuquerque, New Mexico, and Livermore, California.

Organizations: The lead program secretarial office for SNL is the Assistant Secretary for Defense Programs. The Office of Nuclear Energy, Science, and Technology and the Assistant Secretary for Environmental Management also have significant interests and program activities on site. The Albuquerque Operations Office (AL) provides oversight of SNL through the Kirtland Area Office (KAO). KAO is responsible for the day-to-day safety management oversight at SNL. Sandia Corporation, a wholly owned subsidiary of the Lockheed Martin Corporation, operates SNL. As the management and operating contractor, Sandia Corporation is responsible for the operation of all SNL facilities; its environment, safety, health, and quality assurance practices; and the sites' administrative functions. The five-year fixed-fee contract runs through September 30, 2003.

Occupational Medicine Program: The SNL medical organization was established in 1950 to administer emergency care to injured or ill employees and provide medical surveillance for employees. Today, the mission for the Benefits and Health Services Center Program is to protect and promote the physical and mental health of SNL employees, contractors, and visitors. The medical program staff consists of 20 full-time and 19 part-time licensed physicians, nurses, paramedics, and other allied health-care providers. Seven of these providers are board certified in their profession and one is board qualified. Excluding the medical director, there are 13 administrative personnel within the medical organization.

The policies and protocols of the SNL Benefits and Health Services Center Program are based on DOE requirements, Federal regulations, and state laws. Routine activities are defined in Corporate Policy Requirements (CPR), SNL Environment, Safety, and Health (ES&H) policies, and internal operating procedures and protocols. Medical examinations include qualification, fitness-for-duty, suitability (Personnel Assurance Program), and voluntary/wellness. Key occupational medicine activities include the treatment of injuries and illnesses, physical examinations/assessments, medical surveillance, urgent care, employee assistance, psychological evaluations, travel medicine, physical therapy, diagnostic services (laboratory and x-ray), wellness, and emergency medical services.

2. RESULTS

The following results from the SNL Benefits and Health Services Center review are a compilation of the AAAHC survey that determined conformance to national ambulatory health care standards, and the Oversight evaluation that assessed program performance to established DOE policy. Both review processes reflect the principles of integrated safety management (ISM); the identification of roles, responsibilities, and accountabilities; identification of requirements; quality management and improvement activities; and performance assessment and feedback mechanisms to promote continuous program improvement.

Positive Attributes

- SNL management actively supports the Benefits and Health Services Center. Although
 budget reductions have occurred, management actions have not compromised the quality of the
 medical services provided or the future growth of the program. The SNL Medical Director's
 ability to effectively interact with corporate management, KAO, and AL has contributed to a
 comprehensive and well-implemented program.
- 2. Roles, responsibilities, and program requirements are well understood by health services personnel and effectively captured in ES&H and medical department policies. Specifically, Health Services fully understands its role and responsibility in obtaining and analyzing worker exposure information. A principal method of communicating this type of information at SNL is through the Primary Hazard Screen (PHS), an electronic questionnaire developed by the industrial hygiene department. The PHS incorporates worker health and medical issues and is designed to detect new hazards in the work place as well as to prevent disease or injury. Affirmative questionnaire results and findings are forwarded from industrial hygiene personnel to Health Services where they are analyzed and assessed for medical follow-up. The Benefits and Health Services Center is supportive of the PHS and continues to work with the industrial hygiene department in order to ensure the optimum reporting of worker exposure information.

In addition, the Health Services manuals containing internal protocols, CPRs, and meeting minutes are well organized and effectively utilized to communicate the roles and responsibilities of the Benefits and Health Services Center management and staff.

- 3. Health services personnel are engaged in their programs, successful in achieving corporate quality awards, well respected by SNL and KAO ES&H personnel, and proactively address needs and priorities in the promotion of worker protection and occupational health. They actively participate on SNL and DOE working groups and committees to ensure that corporate practices effectively address departmental requirements and are of the highest quality.
- 4. Activities developed and implemented by the Benefits and Health Services Center are highly effective and well-coordinated with management, supervisors, and the collective bargaining units. Health Services has effectively responded to requests for assistance and employee concerns.

5. The performance assessment and feedback systems (Performance Assessment Matrix, Contractor Performance Assessment Program, and Kirtland Information Management System) established and implemented by KAO are effectively used to monitor key elements of the occupational medicine program. Through regular KAO assessments and information management activities, performance issues impacting the Health and Benefits Services Program are systematically identified, and methods of correction are formulated, implemented, and tracked to resolution. The scope of the KAO assessments encompasses all organizations and work processes. Also, they actively involve DOE and SNL ES&H and medical personnel to ensure that SNL is and continues to be a safe and healthful workplace.

Issues

During the review process, Oversight may identify issues that require management attention in accordance with the DOE Order 414.1A, *Quality Assurance*. However, since no issues were identified during the review, no corrective action plan is required from KAO or SNL.

Opportunities for Improvement

The Oversight review identified several opportunities for improvement. These potential enhancements are not intended to be prescriptive. Rather, they are suggested courses of action to be evaluated by the responsible DOE and contractor line managers who may choose to prioritize and modify them as appropriate in accordance with site specific ES&H objectives.

- 1. The essential elements for integrating the Benefits and Health Services Center into the site ISM initiative appear to be in place. However, health services personnel should have electronic access to worker exposure and hazard analysis data to expedite medical surveillance activities. The SNL industrial hygiene department already electronically captures worker exposure and hazard analysis data. Although they report affirmative information to Benefits and Health Services Center personnel, computer systems could be adapted to allow for the immediate and complete access of data by the medical department.
- 2. The language contained in the Standard Terms and Conditions for Cost Reimbursement Contract (CR43 ES&H Services) for Sandia contractors performing contractor-directed work does not clearly define departmental expectations for medical surveillance. Supplemental guidance would help define and communicate the scope of this DOE worker-protection requirement.

Conclusions

The SNL Benefits and Health Services Center complies with DOE requirements for worker protection management and ISM. The AAAHC determined that the medical program is in substantial compliance with all of the association's core and adjunct standards and has awarded it a three-year term of accreditation. The KAO and SNL management exhibits a strong commitment to worker health and safety. In addition, the occupational medicine program is a visible member of the site worker protection team.

The positive attributes of the SNL Benefits and Health Services Center Program are in part, a result of the effective interface of its medical department personnel with Sandia Corporation employees, their contractors, and DOE personnel. They are also due to the existing strong skill

mix of the professional staff and their willingness to address new issues and exercise alternative approaches for improving program performance.

Although no issues were identified, two opportunities for improvement that could further strengthen medical program effectiveness and quality were identified. For example, health services personnel should be provided electronic access to worker exposure and hazard analysis data to increase the efficiency of their medical surveillance activities. Also, the Benefits and Health Services Center should help construct supplemental guidance that fully details departmental requirements for the medical surveillance of SNL contractors who perform contractor-directed work.

Throughout the AAAHC review it was apparent the SNL Benefits and Health Services Center Program is responsive to both management and employee needs. The established working groups/relationships among medical, management, ES&H, and DOE are exemplary and have enhanced program performance. Services such as the International Travel Clinic (travel immunizations and health support) and the SNL wellness program are well received by corporate employees and attest to the efforts of medical department personnel to focus on initiatives that improve the health and welfare of their employee population.

Appendix A

Review Process and Team Composition

Approach and Methodology

The review of the SNL Benefits and Health Services Center Program was conducted according to Oversight protocols and procedures, including the validation of data throughout all stages of the process. In reviewing occupational medicine programs, Oversight supplemented its internal capabilities by teaming with licensed medical physicians who specialize in occupational medicine. To obtain such expertise, Oversight established an agreement with the AAAHC to assist them in performing these reviews.

The AAAHC is a non-profit organization that performs surveys of ambulatory medical care facilities and accredits programs that have demonstrated compliance with an established set of nationally recognized standards. As part of the teaming agreement, the AAAHC supplied a qualified surveyor to supplement the Oversight team in the evaluation of the SNL medical program.

The AAAHC participation in this review served two purposes:

- The AAAHC performed an independent consultative survey of the SNL Benefits and Health Services Center Program using nationally recognized procedures and standards. As part of this effort, SNL medical personnel completed a self-assessment (pre-review survey) that measured their program performance against AAAHC standards. The pre-survey also provided the medical personnel and their management with AAAHC suggestions for improvement, which helped identify what efforts are needed if full accreditation is sought.
- The positive attributes, weaknesses, and insights from the AAAHC survey were factored into the information gathered by the Oversight team during interviews, document reviews, and tours.

The Oversight and AAAHC approach was an effective and efficient method for obtaining the independent perspectives of qualified and experienced medical professionals as well as evaluating program performance against nationally recognized standards. The approach also allowed for the review of DOE policy and its implementation by SNL. Elements of quality management and continuous improvement were also incorporated in the approach due to parallel AAAHC and DOE requirements.

The review employed standard Oversight methods for collecting data including:

- Reviews of policies, procedures, protocols, quality plans, organizational charts, quality records, medical records, equipment calibration records, meeting minutes, budget documents, educational materials, and professional staff credentials
- Interviews with KAO, SNL ES&H personnel, and contractor managers
- Observation of medical department work areas and activities
- Validation of the AAAHC Pre-Review Survey questionnaire.

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions, as delineated in Figure A-1. The Oversight review team focused on the SNL Benefits and Health Services Center Program's ability to accomplish these listed functions.

Standards for the Review

This independent oversight review focused on the effectiveness of SNL in establishing and implementing an effective occupational medicine program, as defined by applicable DOE orders and policies. The DOE orders that specifically define requirements for a DOE contractor occupational medicine program include:

- DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, which establishes a framework for the safety and health management necessary to support a comprehensive medical services program.
- DOE Order 414.1A, *Quality Assurance*, requiring the establishment of an effective management system (i.e., Quality Assurance Programs) using the performance requirements of this order, coupled with technical standards where appropriate.
- DOE Policy 450.4, "Safety Management System," which defines a comprehensive and coordinated program of ES&H expectations and activities that are commonly referred to as ISM. All site ES&H programs, including occupational medicine programs, are to be implemented within this framework.
- DOE Policy 450.1, "Environment, Safety and Health Policy for the DOE Complex," provides the principles and framework for each member of the DOE community to ensure excellence in protection of workers, the public, and environment.
- DOE Policy 450.3, "Authorizing Use of the Necessary and Sufficient Process for Standards-Based Environment, Safety and Health Management," establishes the "necessary and sufficient" process as one means of addressing ES&H standards.
- Section 3162 of the FY 1003 Defense Authorization Act {42 US Sec.7274I}, "Program to
 Monitor Department of Energy Workers Exposed to Hazardous and Radioactive Substances,"
 directs the Secretary of Energy to develop medical evaluation programs for current and former
 DOE workers who are at significant risk of work-related illness as a result of exposures while
 working at DOE facilities.

In reviewing occupational medicine programs across the DOE complex, Oversight tasked the AAAHC to identify medical program elements that are essential for high-quality patient care and help to measure program effectiveness against nationally recognized standards. Although not specific DOE requirements, these elements and other AAAHC standards generally reflect the philosophy detailed in DOE safety management policies. The AAAHC standards emphasize the quality improvement process, which is a central theme of ISM. The DOE Office of Occupational Medicine supports the accreditation process and is in the process of modifying DOE Order 440.1A to be more consistent with accreditation provisions and guidelines.

Occupational Medicine Program Functions

Consistent with DOE policy and requirements, a comprehensive occupational medicine program performs several interrelated functions:

- Clinical services. Medical staff perform various routine medical procedures (e.g., physical
 examinations, laboratory testing) to identify and treat occupational illness or injuries, facilitate
 recovery and safe return to work, and refer patients for further treatment as indicated. In this regard,
 the occupational medicine program serves as an onsite clinic and provides timely and convenient
 access to medical services.
- Assess worker fitness for duty. Health evaluations are conducted to provide initial and continuing assessment of employee fitness for duty through the following examination categories: preplacement, periodic (qualification certification) examinations, return to work, job transfer, and termination.
- Medical surveillance. DOE sites and the work performed may involve the use of hazardous materials and conditions that may affect worker health. As a result, DOE sites need to identify those job categories where workers may be exposed to physical, chemical, or biological hazards. Once the job categories are identified, a thorough process must be implemented to address essential health monitoring and appropriate medical follow-up. The process must be coordinated with other site ES&H organizations so the communication of complete worker exposure and history data to the occupational physician can occur. Worker exposure data and related information must be comprehensive, accessible, and in a useful format so it can be easily interpreted. The occupational physician uses the data to periodically assess the worker's health status, the adequacy of current personal protective equipment and health surveillance activities, identify health trends, and accommodate requests for information.
- Support for efforts to monitor and control exposure to radiation and hazardous materials. DOE must monitor and control radiation exposure in accordance with a radiation protection plan. Such efforts often require various methods for measuring radiation exposure (e.g., whole body counts) that may be performed on a routine basis or to determine the extent of exposure or appropriate medical treatment after an incident. Similarly, DOE must comply with various Federal and state regulations related to worker safety and hazardous materials (e.g., Occupational Safety and Health Administration requirements for protection against exposure to hazardous substances). The occupational medicine program must coordinate with management to ensure that hazards are identified and that appropriate measures to mitigate hazards are in place.
- Support for emergency management preparedness and response. DOE must be prepared to handle emergencies that may confront the workforce. Occupational medicine programs need to be able to provide support during an emergency situation; for example, by providing treatment to injured workers, coordinating support with local hospitals, ensuring that information about hazardous materials is readily available to medical personnel who treat exposure victims, and providing recommendations for protecting the public.
- Information management. To perform the functions noted above, DOE must maintain health information about hazardous materials and employees potentially exposed to those hazards. Many of the materials used at DOE facilities and laboratories, such as plutonium and beryllium, pose significant health risks and are not commonly encountered in general industry. Thus, they may be unfamiliar to community health-care providers in the event of an accidental exposure. Occupational medicine program personnel must also be involved in keeping track of the types of hazardous materials at the sites and their health effects, documenting worker exposures, recommending treatments, and informing management about the effectiveness of safety and health programs.

Figure A-1. Functions of a Comprehensive Occupational Medicine Program

Team Composition

The team membership, composition, and responsibilities are as follows:

Office of Oversight Management Team

Deputy Assistant Secretary for Oversight

S. David Stadler, Ph.D.

Associate Deputy Assistant Secretary

Raymond Hardwick – Operations Neal Goldenberg - Technical Matters

Director, Office of ES&H Evaluations

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Marvin Mielke, R.N., M.S.N, Team Leader Connie Eimer, R.N., B.S.N. Robert Fike, M.D., AAAHC Surveyor

Quality Review Board

Ray Hardwick Tom Staker Robert Freeman George Gebus

Appendix B

Accreditation Association for Ambulatory Health Care, Inc. Survey Comments for the SNL Benefits and Health Services Center Program

Introduction

As part of the survey process, the AAAHC provides a detailed report of the evaluation results. The report includes the rating (i.e., substantially compliant, partially compliant, or non-compliant) awarded to each of the recognized standards that the association considers essential in the delivery of high-quality patient care. Also, the report includes surveyor comments on program strengths and weaknesses, especially where a standard is rated below substantially compliant.

The AAAHC report for the SNL Benefits and Health Services Center Program consists of approximately 130 pages. The AAAHC recommended several areas of improvement to correct minor program weaknesses. This appendix is a summary of the AAAHC report. The complete survey report will be forwarded to the SNL medical director for his review and comment.

AAAHC Assessment

The AAAHC awarded the SNL Benefits and Health Services Center Program to be in substantial compliance in 17 out of 17 standards considered applicable by the surveyor to the health care facility. Substantial compliance was attained in:

- Rights of patients
- Governance
- Administration
- Quality of care provided
- Quality management and improvement
- Clinical records
- Professional improvement
- Facilities and environment
- Surgical services
- Emergency services
- Immediate/urgent care services
- Pharmaceutical services
- Pathology and medical laboratory services
- Diagnostic imaging services
- Occupational health services
- Other professional and technical services
- Teaching and publication activities

A summary of comments on specific standards is provided below.

Rights of Patients

Patients have often commented on satisfaction surveys that in their interactions with Health Services, they were shown respect and consideration, allowed privacy, and provided confidentiality. Patient care areas have been redesigned in response to suggestions and comments made by patients. The medical department is committed to continuous improvement and routinely surveys SNL employees for their suggestions.

Governance

Health Services operates under DOE requirements and SNL policies and guidance that exceed the AAAHC characteristics of governance. SNL Corporation has delegated the supervision of employee benefits to the medical director because of his exceptional managerial skills.

Inclusive in the management of the Health Services Program, the medical director is also responsible for the employee assistance program, health promotion activities, physical therapy services, and case management/workers' compensation activities. The medical director meets with the vice president of Human Resources and other ES&H managers on a weekly basis. His expanded duties and reporting structure affords a highly integrated and coordinated health services and benefits program.

The medical director is responsible for ensuring the proper credentials of all health care providers working in Health Services. Credential files are complete, contemporary, and incisive. All physicians have had formal training in occupational health.

Administration

Health Services personnel document an abundant flow of information, thus capturing a "line of sight" of both company and DOE missions and goals. All functions within the medical department are implemented with an extraordinary degree of security, safety, and confidentiality. The safety of fire hazards and medical records is exceptional.

Job descriptions are highly detailed and performance appraisals are sophisticated and effective.

SNL conducts quarterly employee satisfaction surveys that are well-designed with metric capabilities for measuring improvements. Twice a year, surveys include issues pertaining to Health Services. The medical department addresses and attempts to resolve all issues identified in satisfaction surveys. Past surveys suggest that employees generally valued the services provided by the medical department.

Quality of Care Provided

The medical staff presents exceptional credentials and many have several venues of training, professional experience, and formal certification. As a result, the medical services provided to employees at SNL are of high quality. Although they are highly productive in administering health care, the medical staff allows ample time for related management activities (i.e., committees, working groups).

Quality Management and Improvement

Structured peer reviews are conducted during in-house physician conferences by evaluating the quality and completeness of physician notes in the medical records. Surveyor comments suggested that future peer review efforts should focus on the care aspects that required the judgments of the attending physician (i.e., diagnosis, patient dispositions) as well as the completeness of medical follow-up.

In Closing the Quality of Improvement loop (CQI), the professional staff has thoroughly integrated this process into all aspects of management. The management team is the Quality Improvement (QI) committee. Health Services management has so consistently and effectively used the QI and CQI processes that during the review of studies they appeared inseparable.

Several hundred QI studies have occurred within the last two to three years. However, study results lack explicit documentation of how solutions were determined and accrued. Surveyor comments encouraged the QI study, processes, and results to be stated in easily understood and explicit terms.

The Health Services Information team was highly successful in restructuring employee/medical receptionist activities and obtaining corporate recognition for health promotion and employee assistance activities. Surveyor comments suggest that when the team identifies future projects for improvement they should better define the underlying philosophy and specify concrete goals. When awarded recognition for outstanding performance, awards should be displayed in prominent areas and captioned in easily understood terms.

Health Services is well supported by the corporate risk management function. Compliance to this characteristic surpassed surveyor expectations. A surveyor comment suggested that Health Services consider identifying and listing any risks associated with their program and comparing it to current activities and documents.

Clinical Records

Both principal and extended individual medical records are available to the medical staff. Due to the number of health services provided, medical records are complex but are logical, complete, well-maintained, and uniform. Most exceptional is the tracking of medical records within the clinic by using a bar code sensor.

Medical records are provided the highest state of security.

Surveyor comments included listing the reasons for patient visits in the proximity of the summary sheet, purging records of duplicate forms, evaluating the clarity and completeness of forms, and periodically reviewing the need/use of forms.

Professional Improvement

Medical personnel have ample access to reference materials including the Internet. They regularly attend professional meetings relevant to their clinic functions. Orientation check lists for new employees exists in personnel records and are very thorough.

Facilities and Equipment

The medical facility has limited space, but it is well-managed, clean, and organized. Corridors and conference rooms are free from clutter or overflow. Fire evacuation plans are well-designed and are routinely exercised at least twice a year. Exceptional emergency plans exist due to the types of hazards present at SNL. More than four emergency drill exercises occur annually. Hazardous materials are well secured within the clinic with special vaults for hazardous agents.

Surveyor comments included a consideration of developing a plan for increased space.

Surgical Services

All applicable characteristics were rated as significantly compliant. No written comments or suggestions.

Emergency Services

All applicable characteristics were rated as significantly compliant. No written comments or suggestions.

Immediate/Urgent Care Services

The Health Services Center operates the emergency ambulance services for the SNL site according to the protocols for the city of Albuquerque. The city regularly performs vigorous periodic assessments of emergency services and equipment. The ambulances are outfitted with pediatric equipment due to the number of visitors and families living on Kirtland Air Force Base. The primary function of emergency services is to stabilize and rapidly transport the seriously ill or injured.

Pharmacy Services

A licensed pharmacist reviews all pharmaceutical procedures and processes concerning issues of compliance, controls, and regulations. The SNL pharmaceutical record system was exemplary.

Pathology and Laboratory Services

The laboratory services are "moderately complex" and include blood chemistries, cholesterol values, rapid steep, some special studies of blood and urine including drug testing, and Breathalyzer for alcohol. Registered medical technologists staff the laboratory and a contractor pathologist is its director. The medical laboratory passed a recent Clinic Laboratory Improvement Act inspection with no adverse findings. Laboratory personnel use and record the QA process in an incisive manner.

Diagnostic Imaging

The single x-ray machine is modern, well-maintained, and resides in a lead-shielded room. Radiation controls are of high quality due to the expertise of SNL personnel.

Health Services contracts for certified radiology consultations and reading of all films created.

Periodically, a group of films are re-read by a second radiologist for peer review and QA activities.

Occupational Health Services

Occupational health constitutes the principal function of the Health Services Center. SNL management demonstrates significant support for the medical program and its services are highly valued.

The majority of physicians are board certified in occupational health as well as family practice. Health-care providers are familiar with most job hazards and readily seek explicit information from the industrial hygiene department. Medical personnel actively interface with other SNL and DOE personnel on ES&H and other related activities. Health Services has a high sense of awareness of the Americans with Disabilities Act and practices accordingly.

A dedicated team of nurses provides case management services for ill or injured employees who have been absent for more than a five-day period. Nurses interact with patients on a one-to-one basis and focus on the quality of medical care being provided as well as the earliest possible return to work. The case managers keep excellent records of their activities. Health Services is currently planning to extend training to supervisors concerning the designing of work to accommodate temporary restrictions.

Surveyor comments included sharing results with employees concerning the trending (presence or absence) of data aggregated from each medical surveillance activity. Either industrial hygiene or the medical director should communicate these results. Whenever possible, surveillance data should be statistically analyzed for health trends and effects of exposure. Also, methods for controlling and validating the assignment of employees to a regulated surveillance program should be assessed.

Other comments suggested that the complete "B-reading" report of chest x-rays and the examining radiologist's interpretation be placed into the primary patient record so that physicians can more readily discuss the results with patients.

Other Professional and Technical Services

The professional and technical services reviewed were physical therapy, international travel, employee assistance, and case management of injured and ill employees. The overall quality of the Health Services program is enhanced due to the close association of these technical services.

Teaching and Publication Activities

Health Services provides some educational teaching activities in health promotion and dietetic programs. Students wear identification tags that display their student status and their working relationship with staff and patients is clearly defined and communicated. Some ancillary services have published, and policies directing their approval are in place.